

## Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAMXG1614

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?) :2

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 13:19:44 ON 22 AUG 2005

FILE 'REGISTRY' ENTERED AT 13:19:54 ON 22 AUG 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 19 AUG 2005 HIGHEST RN 861198-35-8  
DICTIONARY FILE UPDATES: 19 AUG 2005 HIGHEST RN 861198-35-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

**TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005**

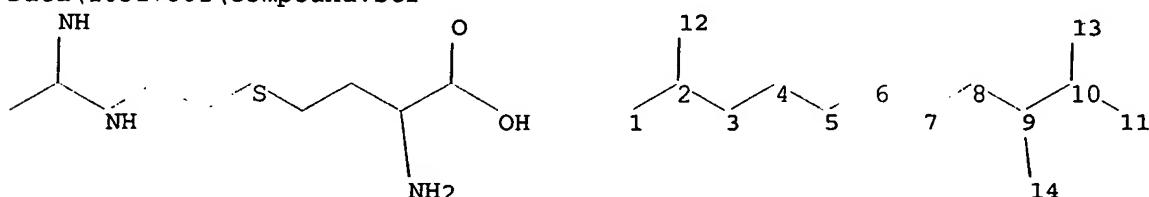
Please note that search-term pricing does apply when conducting SmartSELECT searches.

```
*****
* The CA roles and document type information have been removed from
* the IDE default display format and the ED field has been added,
* effective March 20, 2005. A new display format, IDERL, is now
* available and contains the CA role and document type information.
*****
```

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>  
Uploading C:\Documents and Settings\mgraffeo\My Documents\Critical  
Data\10517801\compound.str



```
chain nodes :  
1 2 3 4 5 6 7 8 9 10 11 12 13 14  
chain bonds :  
1-2 2-3 2-12 3-4 4-5 5-6 6-7 7-8 8-9 9-10 9-14 10-11 10-13  
exact/norm bonds :  
2-3 2-12 3-4 5-6 6-7 9-14  
exact bonds :  
1-2 4-5 7-8 8-9 9-10  
normalized bonds :  
10-11 10-13
```

```
Match level :  
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS  
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS
```

Stereo Bonds:

14-9 (Single Hash).

Stereo Chiral Centers:

9 (Parity=Don't Care)

Stereo RSS Sets:

Type=Relative (Default). 1 Nodes= 9

L1 STRUCTURE UPLOADED

```
=> s 11 sss full  
FULL SEARCH INITIATED 13:20:10 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 131 TO ITERATE
```

```
100.0% PROCESSED 131 ITERATIONS 16 ANSWERS  
SEARCH TIME: 00.00.01
```

L2 16 SEA SSS FUL L1

```
=> s 11 exa full  
FULL SEARCH INITIATED 13:20:20 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 8 TO ITERATE
```

```
100.0% PROCESSED 8 ITERATIONS 2 ANSWERS  
SEARCH TIME: 00.00.01
```

L3 2 SEA EXA FUL L1

|                      | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|------------------|---------------|
| COST IN U.S. DOLLARS |                  |               |
| FULL ESTIMATED COST  | 215.58           | 215.79        |

```
FILE 'CAPLUS' ENTERED AT 13:20:28 ON 22 AUG 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)
```

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 22 Aug 2005 VOL 143 ISS 9  
FILE LAST UPDATED: 21 Aug 2005 (20050821/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l2 or l3  
16 L2  
13 L3  
L4 16 L2 OR L3

=> s l4 (L) antioxidant  
99349 ANTIOXIDANT  
L5 0 L4 (L) ANTIOXIDANT

=> s l4 and chelat?  
126712 CHELAT?  
L6 1 L4 AND CHELAT?

=> d bib abs hitstr

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2004:2680 CAPLUS  
DN 140:65201  
TI (2S)-2-Amino-4-{[2-(ethanimidoyleamino)ethyl]thio}butanoic acid nitric oxide synthase inhibitor in stabilized pharmaceutical dosage forms  
IN Broughton, Stuart James; Gharu, Rajinder Kumar; Leow, Mark Yuon Tuck; Neale, Philip John  
PA SB Pharmco Puerto Rico Inc., P. R.  
SO PCT Int. Appl., 16 pp.  
CODEN: PIXXD2

DT Patent  
LA English

FAN.CNT 1

|      | PATENT NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | KIND | DATE     | APPLICATION NO. | DATE     |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| PI   | WO 2004000296                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | A1   | 20031231 | WO 2003-EP6465  | 20030619 |
|      | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,<br>CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,<br>GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,<br>LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,<br>PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR,<br>TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW<br>RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,<br>KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,<br>FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,<br>BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG |      |          |                 |          |
|      | EP 1513511                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | A1   | 20050316 | EP 2003-740281  | 20030619 |
|      | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,<br>IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |          |                 |          |
| PRAI | GB 2002-14147                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | A    | 20020619 |                 |          |
|      | WO 2003-EP6465                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | W    | 20030619 |                 |          |
| AB   | Pharmaceutical compns. comprising (2S)-MeC(:NH)NHCH <sub>2</sub> CH <sub>2</sub> SCH <sub>2</sub> CH <sub>2</sub> CH(NH <sub>2</sub> )CO <sub>2</sub> H<br>(I) a pharmaceutically acceptable bulking agent and one or more<br>antioxidants or chelating agents are described. A direct<br>compression formula for tablets contained I, EDTA, Avical PH101, silica,<br>and Mg stearate.                                                                                                                                                                                                                                                                                          |      |          |                 |          |

IT 210354-22-6 438542-15-5 638198-40-0

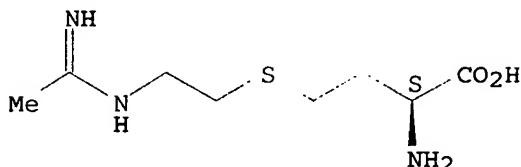
638198-41-1

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
((2S)-2-Amino-4-{[2-(ethanimidoylamino)ethyl]thio}butanoic acid nitric  
oxide synthase inhibitor in stabilized pharmaceutical dosage forms)

RN 210354-22-6 CAPLUS

CN L-Homocysteine, S-[2-[(1-iminoethyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 438542-15-5 CAPLUS

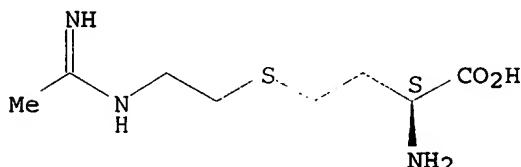
CN L-Homocysteine, S-[2-[(1-iminoethyl)amino]ethyl]-, phosphate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 210354-22-6

CMF C8 H17 N3 O2 S

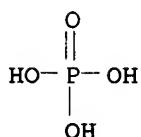
Absolute stereochemistry.



CM 2

CRN 7664-38-2

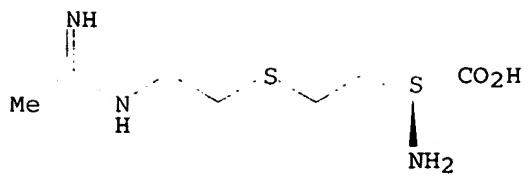
CMF H3 O4 P



RN 638198-40-0 CAPLUS

CN L-Homocysteine, S-[2-[(1-iminoethyl)amino]ethyl]-, monohydrate (9CI) (CA INDEX NAME)

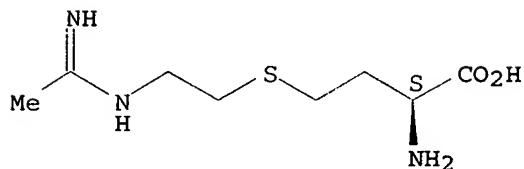
Absolute stereochemistry.



● H<sub>2</sub>O

RN 638198-41-1 CAPLUS  
 CN L-Homocysteine, S-[2-[(1-iminoethyl)amino]ethyl]-, trihydrate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● 3 H<sub>2</sub>O

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s 14 (L) (edta or "ethylenediamintetraacetic acid" or malic or ascorbic)  
 82261 EDTA  
 12 "ETHYLENEDIAMINTETRAACETIC"  
 4020182 "ACID"  
 11 "ETHYLENEDIAMINTETRAACETIC ACID"  
 ("ETHYLENEDIAMINTETRAACETIC" (W) "ACID")  
 29892 MALIC  
 78739 ASCORBIC  
 L7 0 L4 (L) (EDTA OR "ETHYLENEDIAMINTETRAACETIC ACID" OR MALIC OR  
 ASCORBIC)

=>

---Logging off of STN---

=>  
 Executing the logoff script...

=> LOG Y

| COST IN U.S. DOLLARS                       | SINCE FILE ENTRY | TOTAL SESSION |
|--------------------------------------------|------------------|---------------|
| FULL ESTIMATED COST                        | 20.42            | 236.21        |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE       | TOTAL         |

**CA SUBSCRIBER PRICE**

ENTRY SESSION  
-0.73 -0.73

STN INTERNATIONAL LOGOFF AT 13:23:20 ON 22 AUG 2005

## Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAMXG1614

**PASSWORD:**

TERMINAL (ENTER 1, 2, 3, OR ?):2

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 FEB 28 PATDPAFULL - New display fields provide for legal status data from INPADOC  
NEWS 4 FEB 28 BABS - Current-awareness alerts (SDIs) available  
NEWS 5 MAR 02 GBFULL: New full-text patent database on STN  
NEWS 6 MAR 03 REGISTRY/ZREGISTRY - Sequence annotations enhanced  
NEWS 7 MAR 03 MEDLINE file segment of TOXCENTER reloaded  
NEWS 8 MAR 22 KOREAPAT now updated monthly; patent information enhanced  
NEWS 9 MAR 22 Original IDE display format returns to REGISTRY/ZREGISTRY  
NEWS 10 MAR 22 PATDPASPC - New patent database available  
NEWS 11 MAR 22 REGISTRY/ZREGISTRY enhanced with experimental property tags  
NEWS 12 APR 04 EPFULL enhanced with additional patent information and new fields  
NEWS 13 APR 04 EMBASE - Database reloaded and enhanced  
NEWS 14 APR 18 New CAS Information Use Policies available online  
NEWS 15 APR 25 Patent searching, including current-awareness alerts (SDIs), based on application date in CA/CAplus and USPATFULL/USPAT2 may be affected by a change in filing date for U.S. applications.  
NEWS 16 APR 28 Improved searching of U.S. Patent Classifications for U.S. patent records in CA/CAplus  
NEWS 17 MAY 23 GBFULL enhanced with patent drawing images  
NEWS 18 MAY 23 REGISTRY has been enhanced with source information from CHEMCATS  
NEWS 19 JUN 06 The Analysis Edition of STN Express with Discover! (Version 8.0 for Windows) now available  
NEWS 20 JUN 13 RUSSIAPAT: New full-text patent database on STN  
NEWS 21 JUN 13 FRFULL enhanced with patent drawing images  
NEWS 22 JUN 27 MARPAT displays enhanced with expanded G-group definitions and text labels  
NEWS 23 JUL 01 MEDICONF removed from STN  
NEWS 24 JUL 07 STN Patent Forums to be held in July 2005  
NEWS 25 JUL 13 SCISEARCH reloaded  
NEWS 26 JUL 20 Powerful new interactive analysis and visualization software, STN AnaVist, now available  
NEWS 27 AUG 11 Derwent World Patents Index(R) web-based training during August  
NEWS 28 AUG 11 STN AnaVist workshops to be held in North America  
  
NEWS EXPRESS JUNE 13 CURRENT WINDOWS VERSION IS V8.0, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005

|            |                                                         |
|------------|---------------------------------------------------------|
| NEWS HOURS | STN Operating Hours Plus Help Desk Availability         |
| NEWS INTER | General Internet Information                            |
| NEWS LOGIN | Welcome Banner and News Items                           |
| NEWS PHONE | Direct Dial and Telecommunication Network Access to STN |
| NEWS WWW   | CAS World Wide Web Site (general information)           |

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 14:57:13 ON 22 AUG 2005

FILE 'REGISTRY' ENTERED AT 14:57:25 ON 22 AUG 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 19 AUG 2005 HIGHEST RN 861198-35-8  
DICTIONARY FILE UPDATES: 19 AUG 2005 HIGHEST RN 861198-35-8

New CAS Information Use Policies, enter HELP USAGE TERMS for details.

**TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005**

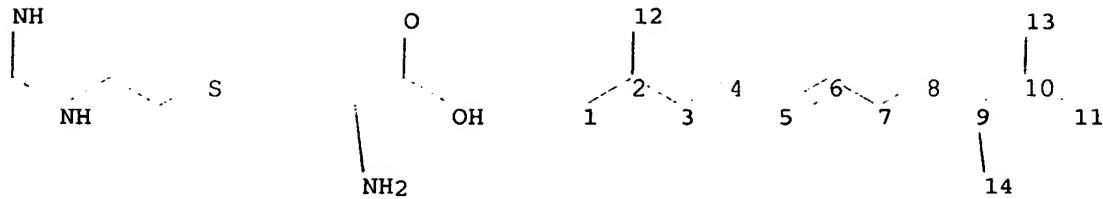
Please note that search-term pricing does apply when conducting SmartSELECT searches.

```
*****
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005. A new display format, IDERL, is now      *
* available and contains the CA role and document type information. *
*****
```

Structure search iteration limits have been increased. See HELP SLIMITS for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

```
=>  
Uploading C:\Documents and Settings\mgraffeo\My Documents\Critical  
Data\10517801\compound.str
```



chain nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14

chain bonds :

1-2 2-3 2-12 3-4 4-5 5-6 6-7 7-8 8-9 9-10 9-14 10-11 10-13

exact/norm bonds :

2-3 2-12 3-4 5-6 6-7 9-14

exact bonds :

1-2 4-5 7-8 8-9 9-10

normalized bonds :

10-11 10-13

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS  
10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS

Stereo Bonds:

14-9 (Single Hash) .

Stereo Chiral Centers:

9 (Parity=Don't Care)

Stereo RSS Sets:

Type=Relative (Default) . 1 Nodes= 9

L1 STRUCTURE UPLOADED

=> s 11 exa full  
FULL SEARCH INITIATED 14:57:50 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 8 TO ITERATE

100.0% PROCESSED 8 ITERATIONS 2 ANSWERS  
SEARCH TIME: 00.00.01

L2 2 SEA EXA FUL L1

|                      |            |         |
|----------------------|------------|---------|
| => file caplus       |            |         |
| COST IN U.S. DOLLARS | SINCE FILE | TOTAL   |
| FULL ESTIMATED COST  | ENTRY      | SESSION |
|                      | 54.68      | 54.89   |

FILE 'CAPLUS' ENTERED AT 14:57:58 ON 22 AUG 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 22 Aug 2005 VOL 143 ISS 9  
FILE LAST UPDATED: 21 Aug 2005 (20050821/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l2 and (malic or edta or edetic or ascorbic)  
13 L2  
29892 MALIC  
82261 EDTA  
227 EDETIC  
78739 ASCORBIC  
L3 1 L2 AND (MALIC OR EDTA OR EDETIC OR ASCORBIC)

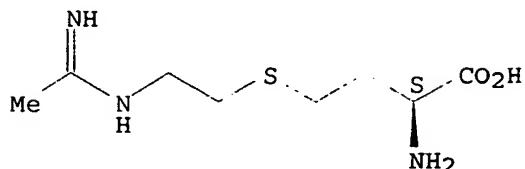
=> d bib abs hitstr

L3 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2004:2680 CAPLUS  
DN 140:65201  
TI (2S)-2-Amino-4-{[2-(ethanimidoylamino)ethyl]thio}butanoic acid nitric oxide synthase inhibitor in stabilized pharmaceutical dosage forms  
IN Broughton, Stuart James; Gharu, Rajinder Kumar; Leow, Mark Yuon Tuck; Neale, Philip John  
PA SB Pharmco Puerto Rico Inc., P. R.  
SO PCT Int. Appl., 16 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

| PATENT NO.                                                                                                                                                                                                                                                                                                                                                                        | KIND | DATE     | APPLICATION NO. | DATE     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| PI WO 2004000296                                                                                                                                                                                                                                                                                                                                                                  | A1   | 20031231 | WO 2003-EP6465  | 20030619 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                 |          |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG                                                                                                                    |      |          |                 |          |
| EP 1513511                                                                                                                                                                                                                                                                                                                                                                        | A1   | 20050316 | EP 2003-740281  | 20030619 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK                                                                                                                                                                                                                                                     |      |          |                 |          |
| PRAI GB 2002-14147                                                                                                                                                                                                                                                                                                                                                                | A    | 20020619 |                 |          |
| WO 2003-EP6465                                                                                                                                                                                                                                                                                                                                                                    | W    | 20030619 |                 |          |
| AB Pharmaceutical compns. comprising (2S)-MeC(:NH)NHCH <sub>2</sub> CH <sub>2</sub> SCH <sub>2</sub> CH <sub>2</sub> CH(NH <sub>2</sub> )CO <sub>2</sub> H (I) a pharmaceutically acceptable bulking agent and one or more antioxidants or chelating agents are described. A direct compression formula for tablets contained I, EDTA, Avical PH101, silica, and Mg stearate.     |      |          |                 |          |
| IT 210354-22-6                                                                                                                                                                                                                                                                                                                                                                    |      |          |                 |          |
| RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) ((2S)-2-Amino-4-{[2-(ethanimidoylamino)ethyl]thio}butanoic acid nitric oxide synthase inhibitor in stabilized pharmaceutical dosage forms)                                                                                                                                                                        |      |          |                 |          |
| RN 210354-22-6 CAPLUS                                                                                                                                                                                                                                                                                                                                                             |      |          |                 |          |

CN L-Homocysteine, S-[2-[(1-iminoethyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s l2 and stability

13 L2

623742 STABILITY

L4 0 L2 AND STABILITY

=> s l2 and formulation

13 L2

126374 FORMULATION

L5 0 L2 AND FORMULATION

=> s l2 (antioxidant or chelat?)

MISSING OPERATOR 'L2 (ANTIOXIDAN'

The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> s l2 and (antioxidant or chelat?)

13 L2

99349 ANTIOXIDANT

126712 CHELAT?

L6 1 L2 AND (ANTIOXIDANT OR CHELAT?)

=> d bib abs

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:2680 CAPLUS

DN 140:65201

TI (2S)-2-Amino-4-{[2-(ethanimidoylethyl)amino]ethyl}butanoic acid nitric oxide synthase inhibitor in stabilized pharmaceutical dosage forms

IN Broughton, Stuart James; Gharu, Rajinder Kumar; Leow, Mark Yuon Tuck; Neale, Philip John

PA SB Pharmco Puerto Rico Inc., P. R.

SO PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

|    | PATENT NO.    | KIND                                                                                                                                                                                                                                                                                                                                                                           | DATE     | APPLICATION NO. | DATE     |
|----|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------|----------|
| PI | WO 2004000296 | A1                                                                                                                                                                                                                                                                                                                                                                             | 20031231 | WO 2003-EP6465  | 20030619 |
|    | W:            | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |          |                 |          |
|    | RW:           | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG                                                                                                                 |          |                 |          |

EP 1513511 A1 20050316 EP 2003-740281 20030619  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
PRAI GB 2002-14147 A 20020619  
WO 2003-EP6465 W 20030619  
AB Pharmaceutical compns. comprising (2S)-MeC(:NH)NHCH<sub>2</sub>CH<sub>2</sub>SCH<sub>2</sub>CH<sub>2</sub>CH(NH<sub>2</sub>)CO<sub>2</sub>H  
(I) a pharmaceutically acceptable bulking agent and one or more  
antioxidants or chelating agents are described. A direct  
compression formula for tablets contained I, EDTA, Avical PH101, silica,  
and Mg stearate.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s 12  
L7 13 L2

=> d 1-13 bib abs

L7 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2005:465475 CAPLUS  
DN 143:71325  
TI GW274150 and GW273629 are potent and highly selective inhibitors of  
inducible nitric oxide synthase in vitro and in vivo  
AU Alderton, Wendy K.; Angell, Anthony D. R.; Craig, Caroline; Dawson, John;  
Garvey, Edward; Moncada, Salvador; Monkhouse, Jayne; Rees, Daryl; Russell,  
Linda J.; Russell, Rachel J.; Schwartz, Sheila; Waslidge, Neil; Knowles,  
Richard G.  
CS Medicines Research Centre, Respiratory & Inflammation Centre of Excellence  
for Drug Discovery, GlaxoSmithKline Research, Stevenage, SG1 2NY, UK  
SO British Journal of Pharmacology (2005), 145(3), 301-312  
CODEN: BJPCBM; ISSN: 0007-1188  
PB Nature Publishing Group  
DT Journal  
LA English  
AB GW274150 ([2-[(1-iminoethyl) amino]ethyl]-L-homocysteine) and GW273629  
(3-[[2-[(1-iminoethyl)amino]ethyl]sulfonyl]-L-alanine) are potent,  
time-dependent, highly selective inhibitors of human inducible nitric  
oxide synthase (iNOS) vs. endothelial NOS (eNOS) (>100-fold) or neuronal  
NOS (nNOS) (>80-fold). GW274150 and GW273629 are arginine competitive,  
NADPH-dependent inhibitors of human iNOS with steady state Kd values of  
<40 and <90 nM, resp. GW274150 and GW273629 inhibited intracellular iNOS  
in J774 cells in a time-dependent manner, reaching IC50 values of  
 $0.2 \pm 0.04$  and  $1.3 \pm 0.16$  μM, resp. They were also acutely selective  
in intact rat tissues: GW274150 was >260-fold and 219-fold selective for  
iNOS against eNOS and nNOS, resp., while GW273629 was >150-fold and  
365-fold selective for iNOS against eNOS and nNOS, resp. The  
pharmacokinetic profile of GW274150 was biphasic in healthy rats and mice  
with a terminal half-life of .apprx.6 h. That of GW273629 was also  
biphasic in rats, producing a terminal half-life of .apprx.3 h. In mice  
however, elimination of GW273629 appeared monophasic and more rapid  
(.apprx.10 min). Both compds. show a high oral bioavailability (>90%) in  
rats and mice. GW274150 was effective in inhibiting LPS-induced plasma  
NOx levels in mice with an ED50 of  $3.2 \pm 0.7$  mg kg<sup>-1</sup> after 14 h i.p. and  
 $3.8 \pm 1.5$  mg kg<sup>-1</sup> after 14 h when administered orally. GW274150 was  
effective in inhibiting LPS-induced plasma NOx levels in mice with an ED50  
of  $3.2 \pm 0.7$  mg kg<sup>-1</sup> after 14 h i.p. and  $3.8 \pm 1.5$  mg kg<sup>-1</sup> after 14 h  
when administered orally. GW273629 showed shorter-lived effects on plasma  
NOx and an ED50 of  $9 \pm 2$  mg kg<sup>-1</sup> after 2 h when administered i.p. The  
effects of GW274150 and GW273629 in vivo were consistent with high  
selectivity for iNOS, as these inhibitors were of low potency against nNOS  
in the rat cerebellum and did not cause significant effects on blood  
pressure in instrumented mice.

RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2005:48432 CAPLUS  
DN 142:169464  
TI Beneficial effects of GW274150 treatment on the development of experimental colitis induced by dinitrobenzene sulfonic acid  
AU Di Paola, Rosanna; Mazzon, Emanuela; Patel, Nimesh S. A.; Genovese, Tiziana; Muia, Carmelo; Thiemermann, Christoph; De Sarro, Angelina; Cuzzocrea, Salvatore  
CS Department of Clinical and Experimental Medicine and Pharmacology, School of Medicine, Policlinico Universitario, University of Messina Torre Biologica, Messina, 98123, Italy  
SO European Journal of Pharmacology (2005), 507(1-3), 281-289  
CODEN: EJPHAZ; ISSN: 0014-2999  
PB Elsevier B.V.  
DT Journal  
LA English  
AB Inflammatory bowel disease is associated with inducible nitric oxide synthase (iNOS) expression, oxidative and nitrosative stress, and leukocyte infiltration in the colon. Here, the authors investigate the effects of the selective iNOS-inhibitor (S)-2-amino-(1-iminoethylamino)-5-thiopentanoic acid (GW274150) on the development of exptl. colitis induced by dinitrobenzene sulfonic acid. When compared to dinitrobenzene sulfonic acid-treated mice, GW274150 (5 mg/kg i.p.)-treated mice subjected to dinitrobenzene sulfonic ACID-induced colitis experienced a significantly lower rate of the extent and severity of the histol. signs of colon injury. Dinitrobenzene sulfonic acid-treated mice experienced hemorrhagic diarrhea and weight loss. At 4 days after the administration of dinitrobenzene sulfonic acid, the mucosa of the colon exhibited large areas of necrosis. Immunohistochem. for nitrotyrosine and poly (ADP-ribose) (PAR) showed an intense staining in the inflamed colon. Treatment of dinitrobenzene sulfonic acid-treated mice with GW274150 significantly reduced the degree of hemorrhagic diarrhea and weight loss caused by administration of dinitrobenzene sulfonic acid. GW274150 also caused a substantial reduction of (i) the degree of colon injury, (ii) the rise in myeloperoxidase (MPO) activity (mucosa), (iii) the increase in staining (immunohistochem.) for nitrotyrosine, as well as (iv) PARP activation caused by dinitrobenzene sulfonic acid in the colon. Thus, GW274150 treatment reduced the degree of colitis caused by dinitrobenzene sulfonic acid. The authors propose that selective inhibition of iNOS activity with GW274150 may be useful in the treatment of inflammatory bowel disease.

RE.CNT 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2004:346162 CAPLUS  
DN 140:399632  
TI Effects of GW274150, a novel and selective inhibitor of iNOS activity, in acute lung inflammation  
AU Dugo, Laura; Marzocco, Stefania; Mazzon, Emanuela; Di Paola, Rosanna; Genovese, Tiziana; Caputi, Achille P.; Cuzzocrea, Salvatore  
CS Department Clinical and Experimental Medicine and Pharmacology, University of Messina, Messina, 98100, Italy  
SO British Journal of Pharmacology (2004), 141(6), 979-987  
CODEN: BJPCBM; ISSN: 0007-1188  
PB Nature Publishing Group  
DT Journal  
LA English  
AB The aim of this study was to investigate the effect of GW274150, a novel, potent and selective inhibitor of inducible nitric oxide synthase (iNOS) activity in a model of lung injury induced by carrageenan administration in the rats. Injection of carrageenan into the pleural cavity of rats elicited an acute inflammatory response characterized by: fluid accumulation in the pleural cavity which contained a large number of

polymorphonuclear cells (PMNs) as well as an infiltration of PMNs in lung tissues and subsequent lipid peroxidation, and increased production of nitrite/nitrate (NO<sub>x</sub>), tumor necrosis factor  $\alpha$  (TNF- $\alpha$ ) and interleukin-1 $\beta$  (IL-1 $\beta$ ). All parameters of inflammation were attenuated in a dose-dependent manner by GW274150 (2.5, 5 and 10 mg kg<sup>-1</sup> injected i.p. 5 min before carrageenan). Carrageenan induced an upregulation of the intracellular adhesion mol.s.<sup>-1</sup> (ICAM-1), as well as nitrotyrosine and poly (ADP-ribose) (PAR) as determined by immunohistochemical anal. of lung tissues. The degree of staining for the ICAM-1, nitrotyrosine and PAR was reduced by GW274150. These results clearly confirm that NO from iNOS plays a role in the development of the inflammatory response by altering key components of the inflammatory cascade. GW274150 may offer a novel therapeutic approach for the management of various inflammatory diseases where NO and related radicals have been postulated to play a role.

RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2004:2680 CAPLUS  
DN 140:65201  
TI (2S)-2-Amino-4-{{[2-(ethanimidoyleamino)ethyl]thio}butanoic acid nitric oxide synthase inhibitor in stabilized pharmaceutical dosage forms  
IN Broughton, Stuart James; Gharu, Rajinder Kumar; Leow, Mark Yuon Tuck; Neale, Philip John  
PA SB Pharmco Puerto Rico Inc., P. R.  
SO PCT Int. Appl., 16 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

| PATENT NO.         | KIND                                                                                                                                                                                                                                                                                                                                                                       | DATE                                                                                                                                                                                                                                                                                                                                                                           | APPLICATION NO. | DATE           |          |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------|----------|
| PI WO 2004000296   | A1                                                                                                                                                                                                                                                                                                                                                                         | 20031231                                                                                                                                                                                                                                                                                                                                                                       | WO 2003-EP6465  | 20030619       |          |
|                    | W:                                                                                                                                                                                                                                                                                                                                                                         | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |                 |                |          |
|                    | RW:                                                                                                                                                                                                                                                                                                                                                                        | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG                                                                                                                 |                 |                |          |
|                    | EP 1513511                                                                                                                                                                                                                                                                                                                                                                 | A1                                                                                                                                                                                                                                                                                                                                                                             | 20050316        | EP 2003-740281 | 20030619 |
|                    | R:                                                                                                                                                                                                                                                                                                                                                                         | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK                                                                                                                                                                                                                                                     |                 |                |          |
| PRAI GB 2002-14147 | A                                                                                                                                                                                                                                                                                                                                                                          | 20020619                                                                                                                                                                                                                                                                                                                                                                       |                 |                |          |
|                    | WO 2003-EP6465                                                                                                                                                                                                                                                                                                                                                             | W                                                                                                                                                                                                                                                                                                                                                                              | 20030619        |                |          |
| AB                 | Pharmaceutical compns. comprising (2S)-MeC(:NH)NHCH <sub>2</sub> CH <sub>2</sub> SCH <sub>2</sub> CH <sub>2</sub> CH(NH <sub>2</sub> )CO <sub>2</sub> H (I) a pharmaceutically acceptable bulking agent and one or more antioxidants or chelating agents are described. A direct compression formula for tablets contained I, EDTA, Avical PH101, silica, and Mg stearate. |                                                                                                                                                                                                                                                                                                                                                                                |                 |                |          |

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2003:947089 CAPLUS  
DN 140:314741  
TI GW274150 inhibits nitric oxide production by primary cultures of rat proximal tubular cells  
AU Chatterjee, Prabal K.; Kvale, Espen O.; Patel, Nimesh S. A.; Thiemermann, Christoph  
CS Department of Experimental Medicine, Nephrology & Critical Care, William

SO Harvey Research Institute, Queen Mary - University of London, UK  
 Medical Science Monitor (2003), 9(10), BR357-BR362  
 CODEN: MSMOFR; ISSN: 1234-1010  
 PB International Scientific Literature, Inc.  
 DT Journal  
 LA English  
 AB Background: Production of nitric oxide (NO) subsequent to expression of inducible NO synthase (iNOS) contributes to the development of ischemic renal injury and inflammation. Here the authors investigate the effects of GW274150, a potent, long-acting and highly selective inhibitor of iNOS activity, on NO production by primary cultures of rat proximal tubular cells (PTC). Material/Methods: Pure populations of PTC were isolated from the cortex of kidneys obtained from male Wistar rats using a combination of collagenase digestion, sieving and Percoll centrifugation. Confluent PTC cultures were incubated for 1-24 h with MEM, interferon- $\gamma$  (IFN- $\gamma$ , 100 iu/mL), bacterial lipopolysaccharide (LPS, 10  $\mu$ g/mL) in combination after which NO production was determined. PTC were also incubated  
 with IFN- $\gamma$  (100 iu/mL) and LPS (10  $\mu$ g/mL) and increasing concns. of GW274150 or L-N6-(1-iminoethyl)lysine (L-NIL) (10 nM - 1 mM) for 24 h after which nitrite levels in the incubation medium were measured.  
 Results: IFN- $\gamma$  and LPS in combination produced a significant, time-dependent increase in NO production. Both GW274150 and L-NIL produced a significant and concentration-dependent inhibition of NO production. However, GW274150 was markedly more potent (EC50 .apprx. 100 nM) than L-NIL (EC50 .apprx. 10  $\mu$ M). Conclusions: GW274150 inhibits NO production by primary cultures of PTCs and may therefore be useful in conditions associated with nitrosative stress of the kidney.  
 RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 2003:300915 CAPLUS  
 DN 138:302642  
 TI Inducible nitric oxide synthase inhibitors as vaccine adjuvants  
 IN Thomsen, Lindy Louise  
 PA Glaxo Group Limited, UK  
 SO PCT Int. Appl., 33 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

|      | PATENT NO.                                                                                                                                                                                                                                                                                                                                                                | KIND | DATE     | APPLICATION NO. | DATE     |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| PI   | WO 2003030935                                                                                                                                                                                                                                                                                                                                                             | A2   | 20030417 | WO 2002-GB4365  | 20020926 |
|      | WO 2003030935                                                                                                                                                                                                                                                                                                                                                             | A3   | 20030814 |                 |          |
|      | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                 |          |
|      | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG                                                                                                                    |      |          |                 |          |
|      | CA 2462582                                                                                                                                                                                                                                                                                                                                                                | AA   | 20030417 | CA 2002-2462582 | 20020926 |
|      | EP 1432440                                                                                                                                                                                                                                                                                                                                                                | A2   | 20040630 | EP 2002-762572  | 20020926 |
|      | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK                                                                                                                                                                                                                                                 |      |          |                 |          |
|      | JP 2005510478                                                                                                                                                                                                                                                                                                                                                             | T2   | 20050421 | JP 2003-533966  | 20020926 |
|      | US 2005054726                                                                                                                                                                                                                                                                                                                                                             | A1   | 20050310 | US 2004-491843  | 20041011 |
| PRAI | GB 2001-24022                                                                                                                                                                                                                                                                                                                                                             | A    | 20011005 |                 |          |
|      | WO 2002-GB4365                                                                                                                                                                                                                                                                                                                                                            | W    | 20020926 |                 |          |
| OS   | MARPAT 138:302642                                                                                                                                                                                                                                                                                                                                                         |      |          |                 |          |

AB The present invention relates to the use of inducible nitric oxide synthase (iNOS) inhibitors as vaccine adjuvants, and in a preferred aspect of the invention they are used for adjuvanting nucleic acid (DNA) vaccines. The iNOS inhibitors preferably provide for an increase in antigen-specific CD4-pos. and/or CD8-pos. T cells. These compds. preferably induce a Th1-biased immune response as measured by increased formation of Th1 cytokines, in particular interferon  $\gamma$ . The present invention further provides pharmaceutical compns. comprising an antigen and the inhibitor.

L7 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2003:289025 CAPLUS

DN 139:301665

TI GW274150, a potent and highly selective inhibitor of iNOS, reduces experimental renal ischemia/reperfusion injury

AU Chatterjee, Prabal K.; Patel, Nimesh S. A.; Sivarajah, Ahila; Kvale, Espen O.; Dugo, Laura; Cuzzocrea, Salvatore; Brown, Paul A. J.; Stewart, Keith N.; Mota-Filipe, Helder; Britti, Domenico; Yaqoob, Muhammad M.; Thiemermann, Christoph

CS Department of Experimental Medicine and Nephrology, The William Harvey Research Institute, Queen Mary, University of London, London, UK

SO Kidney International (2003), 63(3), 853-865

CODEN: KDYIA5; ISSN: 0085-2538

PB Blackwell Publishing, Inc.

DT Journal

LA English

AB Generation of nitric oxide (NO) by inducible nitric oxide synthase (iNOS) may contribute to renal ischemia/reperfusion (I/R) injury. The aim of this study was to investigate the effects of GW274150, a novel, highly selective, potent and long-acting inhibitor of iNOS activity in rat and mouse models of renal I/R. Rats were administered GW274150 (5 mg/kg i.v. bolus administered 30 min prior to I/R) and subjected to bilateral renal ischemia (45 min) followed by reperfusion (6 h). Serum and urinary indicators of renal dysfunction, tubular and reperfusion injury were measured, specifically, serum urea, creatinine, aspartate aminotransferase (AST) and N-acetyl- $\beta$ -D-glucosaminidase (NAG) enzymuria. In addition, renal sections were used for histol. scoring of renal injury and for immunol. evidence of nitrotyrosine formation and poly [ADP (ADP)-ribose] (PAR). Nitrate levels were measured in rat plasma using the Griess assay. Mice (wild-type, administered 5 mg/kg GW274150, and iNOS-/-) were subjected to bilateral renal ischemia (30 min) followed by reperfusion (24 h) after which renal dysfunction (serum urea, creatinine), renal myeloperoxidase (MPO) activity and malondialdehyde (MDA) levels were measured. GW274150, administered prior to I/R, significantly reduced serum urea, serum creatinine, AST, and NAG indicating reduction of renal dysfunction and injury caused by I/R. GW274150 reduced histol. evidence of tubular injury and markedly reduced immunohistochem. evidence of nitrotyrosine and PAR formation, indicating reduced peroxynitrite formation and poly (ADP-ribose) polymerase (PARP) activation, resp. GW274150 abolished the rise in the plasma levels of nitrate (indicating reduced NO production). GW274150 also reduced the renal dysfunction in wild-type mice to levels similar to that observed in iNOS-/- mice subjected to I/R. Renal MPO activity and MDA levels were significantly reduced in wild-type mice administered GW274150 and iNOS-/- mice subjected to renal I/R, indicating reduced polymorphonuclear leukocyte (PMN) infiltration and lipid peroxidn. These results suggest that (1) an enhanced formation of NO by iNOS contributes to the pathophysiol. of renal I/R injury and (2) GW274150 reduces I/R injury of the kidney. We propose that selective inhibitors of iNOS activity may be useful against renal dysfunction and injury associated with I/R of the kidney.

RE.CNT 67 THERE ARE 67 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2003:51504 CAPLUS

DN 139:159864  
TI A novel, potent and selective inhibitor of the activity of inducible nitric oxide synthase (GW274150) reduces the organ injury in hemorrhagic shock  
AU McDonald, M. C.; Izumi, M.; Cuzzocrea, S.; Thiemermann, C.  
CS The William Harvey Research Institute, St. Bartholomew's and The Royal London School of Medicine and Dentistry, London, EC1M6BQ, UK  
SO Journal of Physiology and Pharmacology (2002), 53(4, Pt. 1), 555-569  
CODEN: JPHPEI; ISSN: 0867-5910  
PB Polish Physiological Society  
DT Journal  
LA English  
AB An enhanced formation of nitric oxide (NO) by the inducible NO synthase (iNOS) may contribute to the pathophysiol. of hemorrhagic shock. This study investigates the effect of a novel, potent and selective inhibitor of iNOS activity (GW274150) on the circulatory failure and the organ injury and dysfunction associated with hemorrhagic shock in the anesthetized rat. Hemorrhage (sufficient to lower mean arterial blood pressure to 45 mmHg for 90 min) and subsequent resuscitation with shed blood resulted (within 4 h after resuscitation) in a delayed fall in blood pressure, renal and liver injury and dysfunction as well as the pancreatic injury. Pre-treatment of rats with GW274150 (5 mg/kg at 30 min prior to the onset of hemorrhage) attenuated the renal dysfunction as well as the liver and pancreatic injury caused by hemorrhage and resuscitation. Interestingly, GW274150 did not reduce the delayed fall in blood pressure associated with hemorrhagic shock. We propose that an enhanced formation of NO from iNOS contributes to the organ injury and dysfunction in hemorrhagic shock, and that highly selective inhibitors of iNOS activity, such as GW274150, may represent a novel therapeutic approach for the therapy of hemorrhagic shock.

RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2002:804285 CAPLUS  
DN 138:314136  
TI Beneficial effects of GW274150, a novel, potent and selective inhibitor of iNOS activity, in a rodent model of collagen-induced arthritis  
AU Cuzzocrea, Salvatore; Chatterjee, Prabal K.; Mazzon, Emanuela; McDonald, Michelle C.; Dugo, Laura; Di Paola, Rosanna; Serraino, Ivana; Britti, Domenico; Caputi, Achille P.; Thiemermann, Christoph  
CS School of Medicine, Institute of Pharmacology, University of Messina, Policlinico Universitario, Gazzi, Messina, 98100, Italy  
SO European Journal of Pharmacology (2002), 453(1), 119-129  
CODEN: EJPHEZ; ISSN: 0014-2999  
PB Elsevier Science B.V.  
DT Journal  
LA English  
AB The aim of this study was to investigate the role of inducible nitric oxide synthase (iNOS) on the modulation of the inflammatory response in mice subjected to collagen-induced arthritis. Collagen-induced arthritis was induced in wild-type mice (iNOS-WT) treated with GW274150, a novel, potent and selective inhibitor of iNOS activity, and in mice lacking the gene for iNOS ('iNOS knock-out', iNOS-KO), by an intradermal injection of 100 µl of emulsion containing 100 µg of bovine type II collagen and complete Freund's adjuvant at the base of the tail. After 21 days, a second injection of type II collagen in complete Freund's adjuvant was administered. iNOS-WT mice developed erosive hind paw arthritis when immunized with type II collagen in complete Freund's adjuvant. Over a 35-day period, macroscopic clin. evidence of collagen-induced arthritis first appeared as periarticular erythema and edema in the hind paws. By day 28, the incidence of collagen-induced arthritis was 100% in type II collagen-challenged iNOS-WT mice and the severity of collagen-induced arthritis progressed with radiog. evaluation revealing resorption of bone. Histopathol. of collagen-induced arthritis mice demonstrated erosion of

the cartilage at the joint margins. iNOS-WT mice treated with GW274150 (5 mg/kg, i.p. daily) starting at the onset of arthritis (day 23), and iNOS-KO mice showed a delay of the development of the clin. signs at days 24-35 and an improvement of the histol. status in the knee and paw. Immunohistochem. anal. for nitrotyrosine and for poly(ADP-ribose) polymerase revealed pos. staining in inflamed joints from type II collagen-treated iNOS-WT mice. The degree of staining for nitrotyrosine and poly(ADP-ribose) polymerase were markedly reduced in tissue sections obtained from type II collagen-treated iNOS-WT mice, who had received GW274150 and from iNOS-KO mice. Furthermore, radiog. signs of protection against bone resorption were present in the joints of iNOS-WT mice treated with GW274150 as well as in the joint from iNOS-KO mice. This study provides the first evidence that GW274150, a novel, potent and selective inhibitor of iNOS activity, attenuates the degree of chronic inflammation and tissue damage associated with collagen-induced arthritis in mice. Furthermore, these results suggest that the induction of iNOS and NO production are essential for the up-regulation of the inflammatory response during exptl. collagen-induced arthritis.

RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2001:597331 CAPLUS  
DN 136:288829  
TI GW274150 is a potent, long-acting, highly-selective inhibitor of inducible nitric oxide synthase (NOS-2) with therapeutic potential in post-operative ileus  
AU Alderton, W.; Angell, A.; Clayton, N.; Craig, C.; Dawson, J.; Frend, A.; McGill, J.; Mangel, A.; Moncada, S.; Rees, D.; Russell, L.; Schwartz, S.; Waslidge, N.; Knowles, R.  
CS Glaxo Wellcome R and D, Stevenage, SG1 2NY, UK  
SO Portland Press Proceedings (2000), 16(Biology of Nitric Oxide, Part 7), 22  
CODEN: POPPEF; ISSN: 0966-4068  
PB Portland Press Ltd.  
DT Journal  
LA English  
AB GW274150 [(S)-2-amino-7-acetamidino-5-thioheptanoic acid] is a novel  $\alpha$ -amino acid that potently inhibited human inducible nitric oxide synthase (iNOS) with selectivity vs. human eNOS and nNOS. In studies with purified NOS isoforms, GW274150 was a time-dependent, arginine-site inhibitor of iNOS and a rapidly-reversible inhibitor of eNOS. This novel compound had a long pharmacokinetic half-life and high oral bioavailability in several species. The selectivity of GW274150 against the constitutive NOS isoforms was maintained in vivo, the compound producing no significant effect on conscious mouse blood pressure dosed at 100 mg/kg and on rat brain plus nitrite levels at 50 mg/kg. Post-operative ileus is one potential therapeutic application for GW274150. In a rat model of post-operative ileus, GW274150 was maximally effective at 1-5 mg/kg, yielding a 67% reversal of delayed GI transit. The compound was also effective in a rat model of acute inflammatory pain (adjuvant).

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
AN 2000:209102 CAPLUS  
DN 133:12344  
TI Inhibition of inducible nitric oxide synthase by acetamidine derivatives of hetero-substituted lysine and homolysine  
AU Young, Robert J.; Beams, Richard M.; Carter, Keith; Clark, Helen A. R.; Coe, Diane M.; Chambers, C. Lynn; Davies, P. Ifeyinwa; Dawson, John; Drysdale, Martin J.; Franzman, Karl W.; French, Colin; Hodgson, Simon T.; Hodson, Harold F.; Kleanthous, Savvas; Rider, Peter; Sanders, Daniela; Sawyer, David A.; Scott, Keith J.; Shearer, Barry G.; Stocker, Richard; Smith, Steven; Tackley, Miriam C.; Knowles, Richard G.  
CS Glaxo Wellcome Research and Development, Stevenage, SG1 2NY, UK

SO Bioorganic & Medicinal Chemistry Letters (2000), 10(6), 597-600  
 CODEN: BMCLE8; ISSN: 0960-894X  
 PB Elsevier Science Ltd.  
 DT Journal  
 LA English  
 AB The synthesis and in vitro evaluation of the acetamidine derivs. of hetero-substituted lysine and homolysine analogs have identified potent inhibitors of human nitric oxide synthase enzymes, including examples with marked selectivity for the inducible isoform.

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1999:753054 CAPLUS  
 DN 131:346497  
 TI Use of nitric oxide synthase inhibitors in the manufacture of a medicament for the prophylaxis or treatment of bacterial infection  
 IN Alderton, Wendy Karen; Knowles, Richard Graham; Ladel, Christoph Hubertus  
 PA Glaxo Group Limited, UK  
 SO PCT Int. Appl., 34 pp.  
 CODEN: PIXXD2

DT Patent  
 LA English

FAN.CNT 1

|      | PATENT NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | KIND | DATE     | APPLICATION NO. | DATE     |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------|
| PI   | WO 9959566                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | A1   | 19991125 | WO 1999-EP3265  | 19990512 |
|      | W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,<br>DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,<br>JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,<br>MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,<br>TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,<br>MD, RU, TJ, TM<br>RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,<br>ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,<br>CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG |      |          |                 |          |
|      | AU 9940406                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | A1   | 19991206 | AU 1999-40406   | 19990512 |
| PRAI | GB 1998-10299                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | A    | 19980515 |                 |          |
|      | WO 1999-EP3265                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | W    | 19990512 |                 |          |

OS MARPAT 131:346497  
 AB Inducible nitric oxide synthase inhibitors are used for the manufacture of a medicament for the prophylaxis or treatment of a bacterial infection, where the inhibitor of inducible nitric oxide synthase is e.g. HN:C(R1)NHR2 [R1 = C1-6 straight or branched chain alkyl; Q = QC(NH2)CO2H (Q = alkylene, alkenylene, etc.), ring-substituted benzyl] or a pharmaceutically acceptable salt, ester, or amide thereof.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1998:490618 CAPLUS  
 DN 129:122862  
 TI Preparation of S-[2-(1-iminoethylamino)ethyl]homocysteine as nitric oxide synthase inhibitor  
 IN Beams, Richard Mansfield; Drysdale, Martin James; Franzman, Karl Witold; Frend, Anthony Joseph; Hodson, Harold Francis; Knowles, Richard Graham; Rees, Daryl David; Sawyer, David Alan  
 PA Glaxo Group Ltd., UK; Beams, Richard Mansfield; Drysdale, Martin James; Franzman, Karl Witold; Frend, Anthony Joseph; Hodson, Harold Francis; Knowles, Richard Graham; Rees, Daryl David; Sawyer, David Alan  
 SO PCT Int. Appl., 29 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English

FAN.CNT 1

|          | PATENT NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | KIND | DATE     | APPLICATION NO.  | DATE     |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|------------------|----------|
| PI       | WO 9830537                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | A1   | 19980716 | WO 1998-EP96     | 19980109 |
|          | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,<br>DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,<br>KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,<br>NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,<br>UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM<br>RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,<br>FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,<br>GA, GN, ML, MR, NE, SN, TD, TG |      |          |                  |          |
|          | CA 2277877                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | AA   | 19980716 | CA 1998-2277877  | 19980109 |
|          | AU 9862083                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | A1   | 19980803 | AU 1998-62083    | 19980109 |
|          | AU 723095                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | B2   | 20000817 |                  |          |
|          | ZA 9800179                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | A    | 19990709 | ZA 1998-179      | 19980109 |
|          | EP 958277                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | A1   | 19991124 | EP 1998-904050   | 19980109 |
|          | EP 958277                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | B1   | 20011121 |                  |          |
|          | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,<br>IE, SI, LT, LV, FI, RO                                                                                                                                                                                                                                                                                                                                                                                                                              |      |          |                  |          |
|          | EE 9900281                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | A    | 20000215 | EE 1999-281      | 19980109 |
|          | EE 4013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | B1   | 20030415 |                  |          |
|          | JP 2000504041                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | T2   | 20000404 | JP 1998-530549   | 19980109 |
|          | JP 3251301                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | B2   | 20020128 |                  |          |
|          | BR 9806870                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | A    | 20000418 | BR 1998-6870     | 19980109 |
|          | NZ 336379                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | A    | 20010126 | NZ 1998-336379   | 19980109 |
|          | AT 209183                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | E    | 20011215 | AT 1998-904050   | 19980109 |
|          | PT 958277                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | T    | 20020531 | PT 1998-904050   | 19980109 |
|          | ES 2168737                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | T3   | 20020616 | ES 1998-904050   | 19980109 |
|          | SK 283201                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | B6   | 20030304 | SK 1999-933      | 19980109 |
|          | AP 1204                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | A    | 20030915 | AP 1999-1603     | 19980109 |
|          | W: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |      |          |                  |          |
|          | IL 130551                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | A1   | 20040104 | IL 1998-130551   | 19980109 |
|          | CZ 293099                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | B6   | 20040218 | CZ 1999-2483     | 19980109 |
|          | TW 502010                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | B    | 20020911 | TW 1998-87100434 | 19980114 |
|          | TW 538021                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | B    | 20030621 | TW 1999-88103866 | 19980114 |
|          | NO 9903429                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | A    | 19990712 | NO 1999-3429     | 19990712 |
|          | NO 312192                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | B1   | 20020408 |                  |          |
|          | US 6369272                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | B1   | 20020409 | US 1999-341220   | 19990824 |
|          | HK 1021531                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | A1   | 20020315 | HK 2000-100440   | 20000124 |
|          | US 2002010366                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | A1   | 20020124 | US 2001-930605   | 20010815 |
|          | US 6620848                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | B2   | 20030916 |                  |          |
| PRAI     | US 1997-69882P                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | P    | 19970113 |                  |          |
|          | US 1997-783402                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | A    | 19970113 |                  |          |
|          | WO 1998-EP96                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | W    | 19980109 |                  |          |
|          | US 1999-341220                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | A1   | 19990824 |                  |          |
| OS       | MARPAT 129:122862                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |      |          |                  |          |
| AB       | HN: CMeNHCH2CH2SCH2CH2CH(NH2)CO2H (I) was prepared for use as a selective inhibitor of nitric oxide synthase (NOS). Thus, (S)-I was prepared by treatment of L-homocystine with Na in liquid NH3 and then N-benzyloxycarbonylethanolamine tosylate, cleavage of the benzyloxycarbonyl protecting group with HBr in AcOH, and reaction with Et acetimidate hydrochloride. (S)-I was assayed for inhibition of inducible and endothelial NOS (IC50 = 0.73 and 43 µM, resp.).                                                |      |          |                  |          |
| RE.CNT 7 | THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |      |          |                  |          |
|          | ALL CITATIONS AVAILABLE IN THE RE FORMAT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |      |          |                  |          |

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

| COST IN U.S. DOLLARS                       | SINCE FILE ENTRY | TOTAL SESSION |
|--------------------------------------------|------------------|---------------|
| FULL ESTIMATED COST                        | 59.41            | 114.30        |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION |
| CA SUBSCRIBER PRICE                        | -10.95           | -10.95        |

STN INTERNATIONAL LOGOFF AT 15:01:11 ON 22 AUG 2005